

**WILD TURKEY REPRODUCTION
IN STATE POOR THIS SUMMER**

Based on a S.C. Department of Natural Resources survey, heavy rains across most of the state appear to have negatively impacted wild turkey reproduction this spring and summer, according to a state wildlife biologist.

Annually, the S.C. Department of Natural Resources (DNR) conducts a Summer Turkey Brood Survey to estimate reproduction and recruitment of turkeys in South Carolina. The survey involves agency wildlife biologists, technicians and conservation officers, as well as many volunteers from other natural resource agencies and the general public. Unlike survey results from last year, this year's survey indicates the poorest turkey reproduction in at least six years, according to Charles Ruth, DNR Deer and Turkey Project supervisor.

In 2004, wild turkey brood size and recruitment ratio were outstanding, and that likely accounted for the near record harvest of 14,353 gobblers during the spring 2005 season. Turkey hen numbers should have been high going into the spring/summer reproductive cycle; however, survey results indicate that more than 50 percent of hens failed to successfully raise poults (young turkeys). Additionally, those hens that were successful had below-average brood sizes and the overall turkey recruitment ratio was very low. Recruitment ratio is a measure of young entering the population based on the number of hens in the population.

"In the Southeast," Ruth said, "Mother Nature plays a much greater role in turkey populations than in deer populations, for example. Turkey reproduction and recruitment can be greatly affected by environmental conditions during the spring nesting and brood rearing season with heavy rainfall and/or cool temperatures leading to poor reproductive success."

What does poor reproduction by turkeys this year mean for the spring turkey hunter? Since reproduction was good in 2004, there should be fair numbers of mature gobblers (2 years old) available during the spring 2006 turkey season. However, what will likely be missing next spring are large numbers of jakes (immature gobblers), which can make up 25 to 30 percent of the spring harvest following years of good reproduction. Also, poor reproduction this year combined with the harvest of gobblers next spring will likely lead to a slim season for many hunters in spring 2007.

"The bottom line," Ruth said, "is that it will likely take a couple of years of better reproduction to overcome this year's poor reproduction."

Hunters often wonder why DNR does not promote or schedule a fall turkey season, and although there are a number of considerations, poor reproduction like that experienced this spring is a very important factor.

"Bear in mind that hunting turkeys in the fall differs drastically from spring gobbler hunting, which is familiar to most hunters," Ruth said. "Not only do hunting and calling techniques differ, fall seasons typically allow hunters to take hens or gobblers. Although DNR monitors turkey reproduction annually, the information is not available until about the same time a fall turkey season would be underway, so it is too late to schedule a fall season based on reproductive success or sound biology. DNR could simply schedule a fall season without regard to reproductive data, but harvesting hens following a summer with poor reproduction would further depress the number of hens potentially leading to a rapid decline in turkeys."

South Carolina's turkey population is estimated at about 120,000 birds, and turkey hunting contributes around \$16 million to the state's economy annually.

For more information on the Summer Turkey Brood Survey, see the following link on the DNR Web site: www.dnr.sc.gov/wildlife/turkey/2005BroodSurvey.html.

Figure 1. Map of physiographic regions for 2005 Summer Turkey Survey.

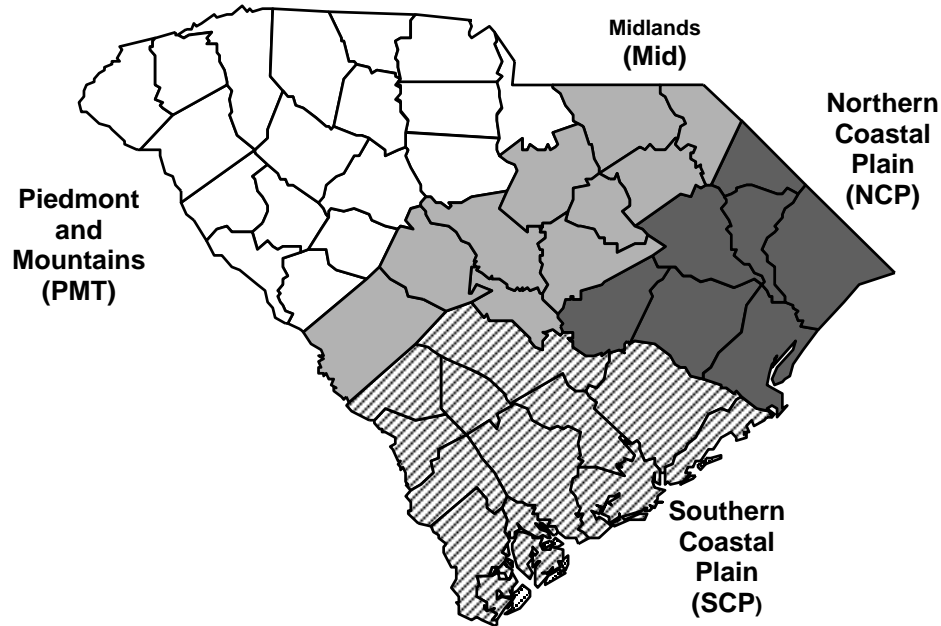


Table 2. Summary of reproductive data for 2005 Summer Turkey Survey by region.

Region	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
Piedmont	276	406 (59)	712	2.6	1.0
Midlands	92	154 (63)	335	3.6	1.4
Northern Coastal	172	89 (34)	657	3.8	2.5
Southern Coastal	396	340 (46)	1,362	3.4	1.9
Statewide	936	989 (51)	3,066	3.3	1.6

Table 3. Statewide Summer Turkey Survey reproductive data 2000-2005.

Year	No. Hens w/Poults	No. Hens w/o Poults (%)	No. Poults	Avg. Brood Size	Total Recruitment Ratio
2000	2,016	838 (29)	8,058	3.8	2.8
2001	2,027	965 (32)	8,236	3.9	2.8
2002	1,608	1,397 (46)	4,877	2.9	1.6
2003	933	994 (52)	3,253	3.3	1.7
2004	1,159	447 (28)	4,854	4.1	3.0
2005	936	989 (51)	3,066	3.3	1.6
Average	1,446	938 (39)	5,390	3.7	2.2

Table 1. 2005 Summer Turkey Survey Results.									
County	No. Observ.	No. Hens	Hens w/ Poult	No. Hens w/o Poult	% Hens w/o Poult	No. Poult	No. Gobblers	No. Unid.	Total Turkeys
Abbeville	44	61	22	39	64	52	31	26	170
Aiken	82	101	23	78	77	94	95	25	315
Allendale	15	25	20	5	0	75	15	14	129
Anderson	16	32	21	11	34	42	11	25	110
Bamberg	22	64	21	43	67	87	34	0	185
Barnwell	101	177	104	73	41	391	157	49	774
Beaufort	9	9	4	5	56	22	19	1	51
Berkeley	125	204	112	92	45	421	282	3	910
Calhoun	1	1	0	1	100	0	0	0	1
Charleston	33	34	24	10	29	61	52	0	147
Cherokee	1	1	1	0	0	2	0	0	3
Chester	22	47	27	20	43	85	18	5	155
Chesterfield	30	31	20	11	35	51	31	17	130
Clarendon	43	36	21	15	42	74	41	43	194
Colleton	35	112	50	62	55	172	6	2	292
Darlington	13	39	7	32	82	23	38	7	107
Dillon	0	0	0	0	0	0	0	0	0
Dorchester	3	1	0	1	100	6	1	0	8
Edgefield	23	27	16	11	41	52	9	0	88
Fairfield	27	51	28	23	45	70	31	3	155
Florence	16	29	4	25	86	37	14	0	80
Georgetown	56	92	66	26	28	216	81	20	409
Greenville	4	1	0	1	100	0	9	21	31
Greenwood	39	89	31	58	65	37	41	4	171
Hampton	45	82	41	41	0	71	103	24	280
Horry	6	10	5	5	0	16	8	4	38
Jasper	1	1	0	1	0	0	0	1	2
Kershaw	2	2	2	0	0	21	0	0	23
Lancaster	1	1	0	1	100	0	0	0	1
Laurens	5	3	2	1	33	3	9	0	15
Lee	11	33	30	3	9	109	40	28	210
Lexington	0	0	0	0	NA	0	0	0	0
McCormick	92	129	47	82	64	155	91	98	473
Marion	16	38	24	14	37	89	19	10	156
Marlboro	6	5	3	2	40	25	0	3	33
Newberry	45	48	31	15	31	114	34	56	252
Oconee	8	11	3	8	73	7	15	7	40
Orangeburg	13	27	20	7	26	56	8	39	130
Pickens	18	43	10	33	77	29	19	34	125
Richland	6	6	1	5	83	9	10	0	25
Saluda	15	30	2	28	93	3	17	8	58
Spartanburg	17	54	15	39	72	20	21	25	120
Sumter	18	28	6	22	79	3	11	28	70
Union	36	50	18	32	64	34	31	0	115
Williamsburg	49	56	52	4	7	225	44	30	355
York	5	6	2	4	67	7	6	0	19
State Total	1175	1927	936	989	51	3066	1502	660	7155